DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-016059
Date Inspected: 04-Aug-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Jobsite

CWI Name:	See below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

1). OBG Field Splice 1W/2W Weld ID: D1 & D2, Face A
2). OBG Field Splice 1W/2W Weld ID: D1 & D2, Face B
3). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face A
4). OBG Field Splice 3W/4W Weld ID: D1 & D2, Face B
5). OBG Field Splice 4W/5W Weld ID: D1 & D2, Face B
6). OBG Field Splice 4W/5W Weld ID: E2, Face A

1). OBG Field Splice 1W/2W Weld ID: D1 & D2, Face A

The QAI periodically observed QC Inspector Tom Pasqualone performing Ultrasonic Testing (UT) of repair cycle 1 (R-1) UT repairs from the A Face of OBG Field Splice 1W/2W Weld ID: D1 and D2. The QAI observed Mr. Pasqualone utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. The QAI observed that The QC Inspector had marked some areas that appeared to be UT rejects. See Summary of Conversations. The UT examination was completed from face A during the QA Inspectors shift and the work at this location appeared to be in general compliance with contract documents. See photos below of QC UT rejectable indication detection and marking.

2). OBG Field Splice 1W/2W Weld ID: D1 & D2, Face B
The QAI periodically observed AB/F approved welders James Zhen (ID 6001) and Hua Quiang Hwang (ID 2930) grinding to remove the weld crown at repair areas. The QAI periodically observed AB/F approved welder James Zhen (ID 6001) performing Shielded Metal Arc Welding (SMAW) in the 4G (overhead) position to repair areas of insufficient fill identified by the QC inspector. The QAI observed QC Inspector John Paglieri was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000-Repair. The work at this location was completed and appeared to be in general compliance with contract documents.

3). OBG Field Splice 2W/3W Weld ID: D1 & D2, Face A
The QAI periodically observed AB/F approved welder Fred Kaddu (ID 2188) performing repair welding per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position of repair excavations at Ultrasonic Testing (UT) reject areas from the A face. AB/F approved welder Kenneth Chappell was performing the excavating by grinding. AB/F QC Inspector Tony Sherwood was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000-Repair. The QAI periodically observed QC Inspector Tony Sherwood performing Magnetic Particle Testing (MT) of the repair excavations at the repair locations prior to Mr. Kaddu performing welding. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. Work was not completed at this location during the QA Inspectors shift and the work appeared to be in general compliance with contract documents.

4). OBG Field Splice 3W/4W Weld ID: D1 & D2, Face B
The QAI periodically observed QC Inspector Jesse Cayabyab performing UT from the B Face of OBG Field Splice 3W/4W Weld ID: D1& D2. The QAI periodically observed that Mr. Cayabyab utilized the UT Procedure identified as SE-UT-D1.5-CT-100 Rev.4 during the examination of the splice weld. The QC technician performed the required shear wave testing during the testing for weld soundness utilizing a .63 x .75 rectangular transducer. The UT examination was not completed from face B during the QA Inspectors shift and the work at this location appeared to be in general compliance with contract documents.

5). OBG Field Splice 4W/5W Weld ID: D1 & D2, Face B
The QAI periodically observed QC Inspector Steve McConnell performing Magnetic Particle Testing (MT) of the prepared groove in the B Face of Splice 4W/5W Weld ID: D1 & D2. The QAI observed that the performance and evaluation of the MT appeared to comply with the MT procedure identified as SE-MT-CT-D1.5-101 Rev. 4. The MT was completed at this location and the work appeared to be in general compliance with contract documents.

6). OBG Field Splice 4W/5W Weld ID: E2, Face A
The QAI periodically observed AB/F approved welder Song Tao Huang (ID 3794) performing welding per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position. The welder was welding the 650mm portion of the weld E2 that is adjacent to the longitudinal diaphragm. The QAI observed QC Inspector John Paglieri was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1040A. The QC Inspector stated that the welding amperes were measured at 150 amps and the welder had preheated to 150°F prior to striking an arc. Later in the shift the QAI observed QC Inspector Tony Sherwood performing a visual inspection (VT) of the completed SMAW at the 650mm area and marking areas for pick-up welding and grinding.

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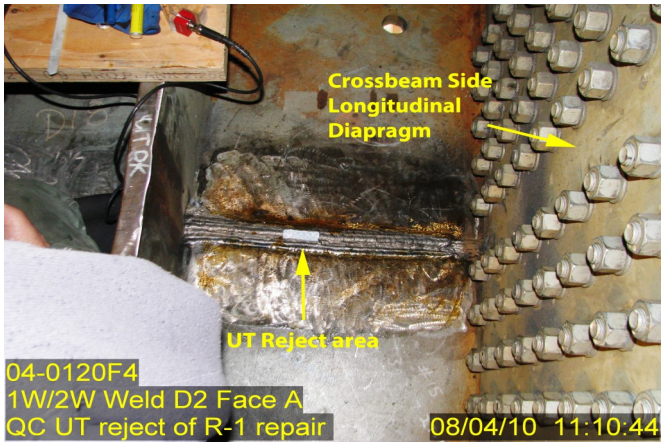
The work at this location was completed and appeared to be in general compliance with contract documents.



Summary of Conversations:

From item 1).

The QAI asked the QC Inspector Tom Pasqualone if any of the repair welds at OBG Splice Weld 1W/2W D1 & D2 have not yet reached the 24 hour cooling time. Mr. Pasqualone stated that some of the repairs had been welded less than 24 hours ago and those would not be Ultrasonically Tested on this shift.

At the completion of the UT from face A at this location the QA Inspector asked how many areas had been rejected. The QC Inspector stated that 3 areas were class A rejects from the A Face and several more areas were not rejectable from the A Face but maybe from the B Face.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammed Fatemi (916) 813 3677, who represents the Office of Structural Materials for your project.

Inspected By:	Madison,Bert	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer